

Chen-Northern, Inc.

A member of the **HHH** group of companies

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TECHNICAL REPORT



1310
1020

REPORT TO: JOHNSON-GRAHAM ASSOCIATES
ATTN: MR. TERRAL SUKUT
644 GRAND AVENUE
BILLINGS, MT 59102

DATE: October 16, 1990
JOB NUMBER: 84-925-1
SHEET: 1 OF 6
INVOICE NO.: 106323

REPORT OF: Building Material Analysis - Sheridan Ranger Station

Sample Identification:

On September 11, 1990, our laboratory received 24 building material samples from Mr. Ed Kiely. A completed chain of custody record was received which identified the above referenced project as the source of the samples. Our laboratory assigned lab numbers 35392 - 35415 to the samples and analyzed them in general accordance with EPA Interim Method EPA 600/M4-82-020, which employs polarized light microscopic techniques with dispersion staining for identification of mineral forms of asbestos. The quantification of asbestos in the sample is intended to be an estimate only. The results are shown on the following pages.

A < sign indicates less than the reported value was present in the sample.

On April 1, 1989, our laboratory was assigned "accredited" status by the National Institute of Standards and Technology's National Voluntary Laboratory Accreditation Program, (NVLAP).

Reviewed by

A handwritten signature, likely of Kathleen A. Smith, is written over a horizontal line. The signature is in cursive and appears to read "Kathleen A. Smith".

rmr

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BUILDING MATERIAL ANALYSIS ASBESTOS CONTENT

SHERIDAN RANGER STATION
BUNKHOUSE (1310)
JOHNSON-GRAHAM ASSOCIATES

October 16, 1990
Job No. 84-925-1
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Lab No.	Sample Identification	Sample Description	Asbestos Identification and Estimated Quantity	Non-Asbestos Fibrous Material Identification and Estimated Quantity
35392	SB-1, HA-1, wall plaster, kitchen wall, hole from old chimney	Gray granular solid with paint	None detected	<1% Cellulose
35393	SB-2, HA-2, 9" floor tile, kitchen corner	Two layers: 1) Brown solid 2) Black mastic Composite of layers:	1-3% Chrysotile None detected 1% Chrysotile	1-5% Cellulose 1-3% Cellulose
35394	SB-3, HA-3, 12" ceiling tile, kitchen above lite fixture	Gold fibrous solid with paint	None detected	90-100% Fibrous Glass
35395	SB-4, HA-3, 12" ceiling tile, around attic scuttle	Gold fibrous solid with paint	None detected	80-90% Fibrous Glass
35396	SB-5, HA-3, 12" ceiling tile, attic scuttle	Gold fibrous solid with paint	None detected	80-90% Cellulose
35397	SB-6, HA-4, 12" floor tile, bathroom by hole in middle of floor	Tan solid	1-3% Chrysotile	<1% Cellulose

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BUNKHOUSE (1310)
JOHNSON-GRAHAM ASSOCIATES**

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Lab No.	Sample Identification	Sample Description	Asbestos Identification and Estimated Quantity	Non-Asbestos Fibrous Material Identification and Estimated Quantity
35398	SB-7, HA-5, 9" floor tile, bathroom by door	Two layers: 1) Tan solid 2) Gold glue	None detected None detected	<1% Cellulose 1-5% Cellulose
35399	SB-8, HA-6, roofing shingles, in front of house, by front door	Black fibrous solid with red rocks	None detected	1-5% Cellulose 20-30% Fibrous Glass
35400	SB-9, HA-8, attic in- sulation, from above attic scuttle	Gold flakes	None detected	<1% Cellulose

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RANGER RESIDENCE (1020)
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Lab No.	Sample Identification	Sample Description	Asbestos Identification and Estimated Quantity	Non-Asbestos Fibrous Material Identification and Estimated Quantity
35401	SRR-1, HA-1, drywall, living room, wall outlet	Two layers: 1) Tan fibrous mat 2) White chalky solid	None detected None detected	100% Cellulose 20-30% Cellulose
35402	SRR-2, HA-1, drywall, bedroom wall switch	Two layers: 1) Tan fibrous mat 2) White chalky solid	None detected None detected	100% Cellulose 20-30% Cellulose
35403	SRR-3, HA-1, drywall, bathroom wall switch	White chalky solid	None detected	20-30% Cellulose
35404	SRR-4, HA-2, sheet floor covering, top of stair	Two layers: 1) Clear/white layer 2) Gray fibrous layer Composite of layers:	None detected 30-40% Chrysotile 15% Chrysotile	None detected 10-20% Cellulose
35405	SRR-5, HA-3, VA base- board, utility room corner by wall closet	Two layers: 1) Rust rubber 2) Brown glue	None detected None detected	None detected 1-3% Cellulose 1-3% Wollastonite
35406	SRR-6, HA-4, asbestos insulative paper, wood joist below stairwell at bottom of stairs	Gray fibrous mat	80-90% Chrysotile	1-5% Cellulose

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Lab No.	Sample Identification	Sample Description	Asbestos Identification and Estimated Quantity	Non-Asbestos Fibrous Material Identification and Estimated Quantity
35407	SRR-7, HA-4, asbestos insulative paper, same		N o t A n a l y z e d	
35408	SRR-8, HA-4, asbestos insulative paper, same		N o t A n a l y z e d	
35409	SRR-9, HA-5, asbestos pipe wrap, air delivery duct in basement	Gray fibrous mat	70-80% Chrysotile	5-10% Cellulose
35410	SRR-10, HA-5, asbestos pipe wrap, same		N o t A n a l y z e d	
35411	SRR-11, HA-5, asbestos pipe wrap, same		N o t A n a l y z e d	
35412	SRR-12, HA-7, roofing shingles, roof, corner of garage	Black fibrous solid with brown rocks	None detected	1-5% Cellulose 20-30% Fibrous Glass
35413	SRR-13, HA-8, sheet floor covering, bathroom cor- ner by partition door	Three layers: 1) Clear/white vinyl 2) White fibrous layer 3) Gold glue	None detected None detected None detected	None detected 20-30% Cellulose 1-5% Fibrous Glass 1-5% Cellulose

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35414	SRR-14, VA baseboard, bathroom corner by door to hallway	Brown rubber	None detected	None detected
35415	SRR-16, HA-10, cell. insulation, behind attic scuttle in garage	Gray fibers	None detected	100% Cellulose